

Characterization of Community Pharmacists' Use of Online Information Databases

Marie A. Abate, Pharm.D., Arthur I. Jacknowitz, M.S., Pharm.D., School of Pharmacy,
James M. Shumway, Ph.D., School of Medicine, West Virginia University,
Morgantown, West Virginia

Many computerized information services have been developed to facilitate the retrieval and dissemination of medical information. Drug information in particular has been identified as a medical information need. Pharmacists, especially in the community setting, can serve an important role as an information resource to patients, physicians, and other health care professionals. Community pharmacists, however, often have inadequate reference libraries and have infrequently accessed online information. Therefore, the purpose of this study was to evaluate and compare the utility of GRATEFUL MED and BRS Colleague as information sources to community pharmacists, pharmacy students during externship rotations at these sites, and university based clinical pharmacists.

INTRODUCTION

Access to medical information, particularly related to drugs, has been identified as a significant area of need. A number of medical databases are available for access by health care practitioners. User friendly software such as GRATEFUL MED and services available from vendors allow for direct database access by the individual actually needing the information, i.e. "end-user" searching. However, most studies of end-user computer searching have been conducted in university or medical center environments [1,2]. These studies have also focused primarily on physicians and medical students. Community pharmacists have been increasingly called upon to expand their clinical role as information providers [3]. Although they frequently utilize computers in their daily practice, the computers are generally not used for online database access and their available references have often been inadequate. The objective of this study was to evaluate and compare the utility of GRATEFUL MED and BRS Colleague as information sources to community pharmacists, pharmacy students completing externship rotations at these sites, and university based clinical pharmacists.

METHODS / RESULTS

A total of 8 independent community pharmacies employing 24 pharmacists were selected for participation. Four of the pharmacies initially had

access to GRATEFUL MED for a 12 month time period while the others had access to BRS Colleague; the groups crossed-over for the remaining 12 month study period. The clinical pharmacists used GRATEFUL MED for the first 12 months, followed by BRS. Each database search was recorded on the computer and the following use information was obtained: date, databases accessed, total time spent per session, actual search statements, and # of documents found and displayed. An accompanying log sheet recorded the specific question/information desired, the extent to which the needed information was found, and who the search was conducted for.

The pharmacists conducted searches for 1258 questions during the first 12 months of computer use: clinical pharmacists - 713 searches, community pharmacists - 432 searches, pharmacy students - 113 searches. Thirty-four percent of the searches conducted at the community pharmacies were done on behalf of others: physicians - 40%, patients - 18%, other pharmacists - 13%, nurses - 12%, others - 17%. Therapeutic use information was sought most commonly (39% of questions), followed by side/adverse effect information (17%), and dosage/administration and general drug information (8% each). Pharmacists spent a mean of 4.3 minutes per GRATEFUL MED search, compared to 20.5 minutes per BRS Colleague search. At least partial information was found for 62% of the searches. The second 12 month computer use period is currently underway. All searches will also be reviewed to assess their appropriateness and degree to which they contained searching errors. Pharmacists in community settings have significant opportunity and potential to serve as comprehensive drug information resources for patients and other health professionals.

References

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